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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,244	10/16/2003	Naveen Sharma	A2485-US-NP XERZ 2 01275	9408
7590 02/07/2007 Patrick R. Roche FAY, SHARPE, FAGAN, MINNICH & McKEE, LLP Seventh Floor 1100 Superior Avenue Cleveland, OH 44114-2579			EXAMINER PRICE, NATHAN E	
			ART UNIT 2194	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			02/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/687,244

Applicant(s)

SHARMA ET AL.

Examiner

Nathan Price

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/16/2003, 9/2/2004 and 6/20/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/20/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1 – 21 are pending.

Priority

Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119(e) as follows:

This application and provisional application 60/319,625 do not appear to have a common inventor.

Specification

2. The disclosure is objected to because of the following informalities:

Paragraph 2, which provides cross-references to related applications, includes empty spaces for application numbers.

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Appropriate correction is required.

Claim Objections

3. Claims 1 – 21 are objected to because of the following informalities:

The claims include acronyms (for example, CIM) without clearly indicating the meaning of the acronyms.

There appears to be a spelling error (wehreïn) in claims 3 and 13.

There is insufficient antecedent basis for “the core device model agent” in claim 7.

There is insufficient antecedent basis for “the Java virtual machine” in claim 9.

There is insufficient antecedent basis for “the host device” in claim 19.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 8 – 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 8 and 9 contain the trademark/trade name Java and J2ME. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used

properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe programming and execution environments and, accordingly, the identification/description is indefinite.

6. Claims 10 – 21 are rejected because it is not clear if claim 10 is claiming the device or DMA. Claims 11 – 21 refer to the DMA, but it is not clear if the DMA is part of, or separate from, the device. For this Office Action, claim 10 is interpreted as claiming the DMA that may, but not necessarily, be part of the device.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1 – 21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

8. Claims 1 – 21 appear to be directed towards a DMA that can be implemented in software alone. The device referenced in claim 1 does not appear to be part of the DMA. It appears that the claims do not include hardware necessary to realize the

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functionality of the software. The claims are therefore rejected as being directed toward non-statutory subject matter. See MPEP 2106.01.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1 – 3, 5 – 7, 10 – 13 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Mandal et al. (US 7,043,738 B2; hereinafter Mandal).

10. As to claim 1, Mandal teaches a device model agent (DMA) comprising:

at least one device API through which the agent communicates with a device [col. 5 lines 38 – 57];

a core device model including at least one CIM provider [col. 5 lines 38 – 62; col. 6 lines 18 – 44]; and

a service environment [col. 2 line 65 – col. 3 line 3].

11. As to claim 2, Mandal teaches the core device model comprises a service manager [col. 5 lines 38 – 62].
12. As to claim 3, Mandal teaches the service manager loads services into the service environment [col. 6 lines 29 – 44].
13. As to claim 5, Mandal teaches the service manager controls lifecycles of at least one service installed in the DMA [col. 13 lines 22 – 37].
14. As to claim 6, Mandal teaches the core device model comprises an object manager [col. 6 lines 18 – 44].
15. As to claim 7, Mandal teaches the core device model agent comprises an event manager [col. 13 lines 22 – 37; col. 20 lines 4 – 14].
16. As to claim 10, Mandal teaches, in a device comprising an operating system and a web server, a device model agent (DMA) in communication with the operating system and the web server and running at least one service [col. 2 lines 53 – 64; col. 4 lines 21 – 31; col. 5 lines 12 – 26; col. 6 lines 1 – 10, 39 – 44; col. 17 lines 38 – 55; col. 18 lines 16 – 29], the DMA comprising:
 - a service environment in which the at least one service runs, the service environment facilitating communication between the at least one service and

other parts of the DMA, the service environment further facilitating communication between the at least one service and the web server [col. 5 lines 12 – 26; col. 17 lines 38 – 55; col. 18 lines 16 – 29];

a core device model including a service manager in communication with and managing the at least one service [col. 5 lines 38 – 62; col. 6 lines 18 – 44]; and

a device API in communication with the core device model and aspects of the operating system of the device [col. 4 lines 21 – 31; col. 5 lines 38 – 57].

17. As to claim 11, Mandal teaches the at least one service communicates with a service supplier via the web server [col. 13 lines 22 – 37; col. 14 lines 1 – 14; col. 17 lines 38 – 55; col. 18 lines 16 – 29].

18. As to claim 12, Mandal teaches the at least one service communicates with a server of the service supplier to deliver information about the device [col. 13 lines 22 – 37; col. 14 lines 1 – 14; col. 17 lines 38 – 55; col. 18 lines 16 – 29].

19. As to claim 13, Mandal teaches the at least one service communicates with a server of the service supplier to request an additional service [col. 13 lines 22 – 37; col. 14 lines 1 – 14; col. 17 lines 38 – 55; col. 18 lines 16 – 29].

20. As to claim 15, Mandal teaches the device model agent provides a UI through the web server [col. 17 lines 19 – 45].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mandal (US 7,043,738 B2). Although not specifically stated, Mandal at least implies the service environment is a Java virtual machine because Mandal teaches the use of Java in the disclosed components [col. 5 lines 38 – 45; col. 6 lines 18 – 38].

22. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mandal as applied to claim 2 above, and further in view of Davis et al. (US 6,976,262 B1; hereinafter Davis).

23. As to claim 4, Mandal fails to specifically teach maintaining a list of services as claimed. However, Davis teaches the service manager maintains a list of services installed in the DMA [col. 7 lines 47 – 52]. It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to combine these

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references because Mandal teaches utilizing a repository [col. 6 lines 39 – 44] and Davis teaches an interface for accessing a repository.

24. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mandal as applied to claim 1 above, and further in view of Sun ("Java™ 2 Platform Micro Edition (J2ME™) Technology for Creating Mobile Devices" see PTO-892 with this Office Action).

25. As to claim 9, Mandal fails to teach J2ME. However, Sun teaches the Java virtual machine is J2ME. It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to combine these references because Mandal teaches the disclosure can be applied to a wide variety of devices [col. 12 lines 1 – 16] and Sun teaches providing access to a wide variety of devices with the use of J2ME [page 1 ¶ 3; page 4 (second section)].

26. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mandal as applied to claim 10 above, and further in view of Tanenbaum (see PTO-892 with this Office Action).

27. As to claim 14, Mandal fails to specifically teach an edge server. However, when combined with Tanenbaum, Mandal teaches the at least one service checks in with an edge server to deliver pending messages to the edge server and to receive waiting

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messages from the edge server [Mandal: col. 17 lines 38 – 55; col. 18 lines 16 – 29; Tanenbaum: page 688 ¶ 4 – page 689 ¶ 3]. It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to combine these references because Mandal teaches implementing the disclosure over a network and Tanenbaum provides details of how networks operate.

28. Claims 16 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandal as applied to claim 10 above, and further in view of Silberschatz (see PTO-892 with this Office Action).

29. As to claim 16, Mandal fails to specifically teach monitoring device events as claimed. However, Mandal teaches managing devices such as disks and CPUs [col. 5 lines 46 – 57] and Silberschatz teaches monitoring events associated with disks and CPUs [page 641 ¶ 5 – 6], making it obvious to have the core device model monitor device events. It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to combine these references because Silberschatz provides details about the operation of devices that Mandal teaches monitoring.

30. As to claim 17, Mandal combined with Silberschatz teaches the core device model takes at least one action in response to device events [Silberschatz: page 641 ¶ 5 – 6].

31. As to claim 18, Mandal combined with Silberschatz teaches the at least one action includes publishing data [Silberschatz: page 641 ¶ 5 – 6].

32. As to claim 19, Mandal combined with Silberschatz teaches the at least one action includes invoking processes on the host device as directed by external clients [Silberschatz: page 641 ¶ 5 – 6].

33. As to claim 20, Mandal combined with Silberschatz teaches the at least one action includes requesting addition of a service [Mandal: col. 2 line 65 – col. 3 line 3; col. 5 lines 38 – 62].

34. As to claim 21, Mandal combined with Silberschatz teaches the at least one action includes deleting a service [Mandal: col. 2 line 65 – col. 3 line 3; col. 5 lines 38 – 62].

Conclusion

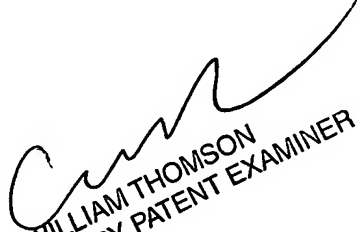
35. The prior art made of record on the P.T.O. 892 that has not been relied upon is considered pertinent to applicant's disclosure. Careful consideration of the cited art is required prior to responding to this Office Action, see 37 C.F.R. 1.111(c).

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Price whose telephone number is (571) 272-4196. The examiner can normally be reached on 6:30am - 3:00pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NP


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER